(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 20 October 2005 (20.10.2005)

PCT

(10) International Publication Number WO 2005/098127 A1

- (51) International Patent Classification⁷: D21C 9/18, 9/06
- (21) International Application Number:

PCT/SE2005/000350

- (22) International Filing Date: 9 March 2005 (09.03.2005)
- (25) Filing Language:

Swedish

(26) Publication Language:

English

(30) Priority Data: 0400940-3

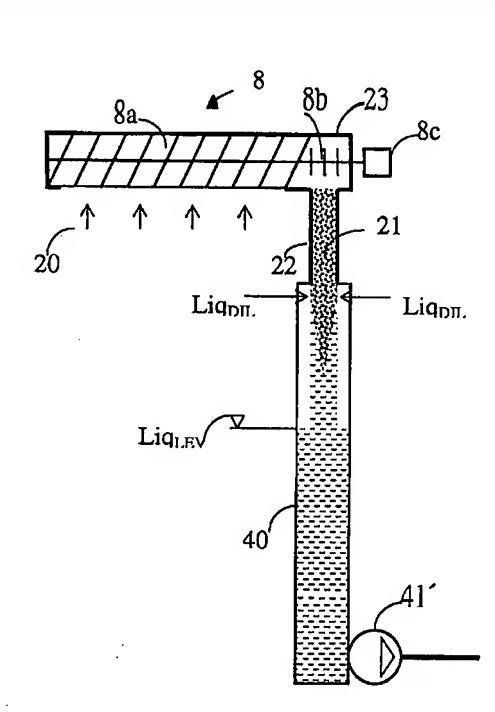
7 April 2004 (07.04.2004) SE

(71) Applicant (for all designated States except US): KVAERNER PULPING AB [SE/SE]; P.O. Box 1033, S-651 15 Karlstad (SE).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SNEKKENES, Vidar [NO/SE]; Herrhagsgatan 62, S-652 19 Karlstad (SE). GUSTAVSSON, Lennart [SE/SE]; Renvallsvägen 38, S-653 50 Karlstad (SE). SAETHERÅSEN, Jonas [SE/SE]; Kärrängsvägen 37, S-663 42 Hammarö (SE). OLSSON, Göran [SE/SE]; Prästängsvägen 4, S-652 30 Karlstad (SE).
- (74) Agent: FURHEM, Hans; Kvaerner Pulping AB, Box 1033, S-651 15 Karlstad (SE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,

[Continued on next page]

(54) Title: METHOD AND DEVICE FOR DILUTION OF CELLULOSE PULP



(57) Abstract: The invention concerns a method and a device for the dilution of dewatered cellulose pulp that maintains a consistency of 20-30% of greater. By shredding of the pulp to a finely divided dry granulate, dilution to a homogeneous consistency in the medium consistency range can take place exclusively through hydrodynamic effects from the addition of dilution fluid. The dilution fluid is added to the granulate at a position at which the granulate is in the free fall in a stand pipe (22, 40) and above a level LiqLEV of diluted pulp in the stand pipe. A number of nozzles are arranged around the periphery of the stand pipe, directed in towards the centre of the stand pipe, obliquely downwards in the direction of fall of the granulate. It is possible through this simplified procedure to avoid completely the conventional dilution screws, and this reduces the investment costs and operating costs, while at the same time unnecessary mechanical influence of the pulp fibres can be avoided.

WO 2005/098127 A1

WO 2005/098127 A1



PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

·

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.